

WHAT IS CLAIMED IS:

1. A data transmission device comprising:

an input means for receiving as input a first packet containing header information and real time data, the header information including at least synchronizing time reference information necessary for producing a synchronizing signal to be used by the receiving side;

an extraction means for extracting the synchronizing time reference information from the first packet received by said input means;

a conversion means for converting the synchronizing time reference information extracted by said extraction means into a time stamp;

a packet formation means for forming a second packet containing the header information including the time stamp obtained by the conversion of said conversion means and the first packet received by said input means; and

a transmission means for transmitting the second packet formed by said packet formation means.

2. The data transmission device according to claim 1, wherein said input means receives as input a first packet formatted to the MPEG2-TS format;

said extraction means extracts the PCR (Program Clock Reference) contained in the first packet; and

said conversion means converts the extracted PCR into the time stamp conforming to the RTP (Real-time Transport Protocol) so as to make it to be contained

in a second packet.

3. The data transmission device according to claim 1, wherein said conversion means copies part of said synchronizing time reference information to produce said time stamp.

4. The data transmission device according to claim 1, wherein said conversion means adds an offset to said synchronizing time reference information to produce said time stamp.

5. A data transmission method comprising the steps of:

receiving as input a first packet containing header information and real time data, the header information including at least synchronizing time reference information necessary for producing a synchronizing signal to be used by the receiving side ;

extracting the synchronizing time reference information from said first packet received;

converting said extracted synchronizing time reference information into a time stamp;

forming a second packet containing said header information and the first packet, the header information including said time stamp and

transmitting said second packet.

6. The data transmission method according to claim 5, wherein a first packet formatted to the MPEG2-TS format is received;

the PCR (Program Clock Reference) contained in the first packet is extracted;

and

the extracted PCR is converted into a time stamp conforming to the RTP (Real-time Transport Protocol) so as to make it to be contained in a second packet.

7. The data transmission method according to claim 5, wherein part of said synchronizing time reference information is copied to produce said time stamp.

8. The data transmission method according to claim 5, wherein an offset is added to said synchronizing time reference information to produce said time stamp.